CA 650 Installation Instructions

PROFESSIONAL INSTALLATION STRONGLY RECOMMENDED

Installation Precautions:

Roll down window to avoid locking keys in vehicle during installation

Avoid mounting components or routing wires near hot surfaces

Avoid mounting components or routing wires near moving parts

Tape or loom wires under hood for protection and appearance

Use grommets when routing wires through metal surfaces

Use a Digital Multi Meter for testing and verifying circuits. DO NOT USE A TEST LIGHT, OR "COMPUTER SAFE PROBE" as these can set off air bags or damage vehicle computers.

Technical Support (800) 421-3209
or go to
http://techservices.codesystems.com

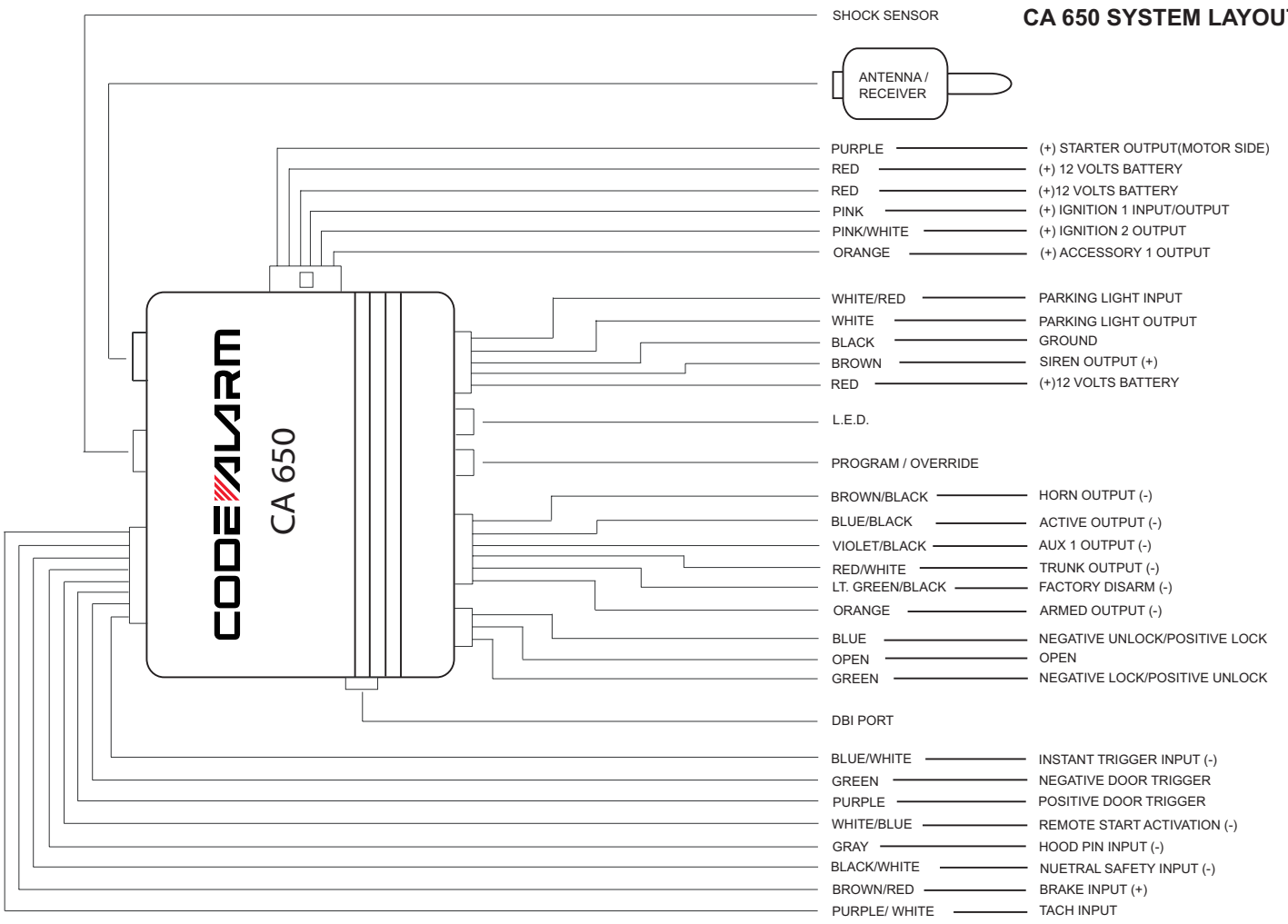
FCC COMPLIANCE

This device complies with Part 15 of the FCC rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including any interference that may cause undesired operation.

Warning! Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CA 650 SYSTEM LAYOUT



CA650 - Programming Guide

Feature Bank 1 - 3 Chirps	***Transmitter Programming***			
Feature Bank 2 - 4 Chirps	***1 LED Flash***	***2 LED Flashes***	***3 LED Flashes***	***4 LED Flashes***
Siren/Horn Chirps	**Both On**	Siren Only	Horn Only	OFF
Passive/Active Arming	**Active**	Passive No Locks	Passive w/Locks	
Automatic Rearm	**ON**	OFF		
Door Ajar Warning	**Instant**	45 Second Delay		
Car Jack Mode	**OFF**	Active	Passive	
Feature Bank 3 - 5 Chirps	***1 LED Flash***	***2 LED Flashes***	***3 LED Flashes***	***4 LED Flashes***
Extended Lock Pulse	**0.8 Seconds**	3.5 Seconds	Double Pulse	D/L w/Comfort
Ignition Controlled Locks	**ON**	Lock Only	Unlock Only	OFF
Locks w/Remote Start	**Before Start**	After Shutdown	Both	OFF
Pathway Illm. w/P.Lights	**OFF**	30 sec. w/Unlock	30/Unlock 10/Lock	
Out of Range Check	**ON**	OFF		
Custom Code	**OFF**	ON		
Feature Bank 4 - 6 Chirps	***1 LED Flash***	***2 LED Flashes***	***3 LED Flashes***	***4 LED Flashes***
Siren Output	**Steady**	5 Sec. Pulsed		Horn
Horn Output	Dome Light	**Horn Output**	Factory Rearm	(-) Durring Crank
Horn Output Timing	**16mS**	40mS		
Factory Disarm	2nd Stage Unlock	**Factory Disarm**	Start Status	
AUX 1 Output	**Push & Hold**	Latched	Latch w/Ign. Reset	Program Time
R/S Activation Input	**1 Pulse**	2 Pulses	3 Pulses	
Feature Bank 5 - 7 Chirps	***1 LED Flash***	***2 LED Flashes***	***3 LED Flashes***	***4 LED Flashes***
Gas/Diesel	**Gas**	10 sec delay	15 Sec Delay	20 Sec Delay
		5 Flashes - DBI Diesel Mode		
Run Time	**10 Minutes**	20 Minutes	30 Minutes	5 Minutes
Factory Disarm w/Trunk	**ON**	OFF		
Parking Lights	**Steady**	Flashing		
Single/Double Pulse Start	**Double**	Lock + Star	Single	
Turbo Timer Options	**OFF**	On / No Shock	On w/Shock	1 Minute
		5 Flashes - 3 Minutes	***6 Flashes*** - 5 Minutes	
2 / 3 Hour Start Time	**3 Hour**	2 Hour		

Note: Defalut settings are in **BOLD** print

Note: Turbo Timer Options On/No Shock and On w/Shock are for use with an OFF BOARD Turbo Timer.

CA650 - Programming Guide, Continued

Feature Bank 6 - 8 Chirps	1 LED Flash	2 LED Flashes	3 LED Flashes	4 LED Flashes
Security Features	**ON**	OFF		
Engine Checking	**Tach**	Voltage	Crank Time Only	DBI Port
Crank Time	**1- Flash 0.6 Sec**	2- Flash 0.8 Sec	3-Flash 1.0 Sec	4-Flash 1.2 Sec
	5-Flash 1.4 Sec	6-Flash 1.6 Sec	7-Flash 1.8 Sec	8-Flash 2.0 Sec
	9-Flash 3.0 Sec	10-Flash 4.0 Sec		
Hi/Low Engine Check	**Low**	High		
Shock Sensor Testing	ON	**OFF**		

Note: Defalut settings are in **BOLD** print

SETUP & PROGRAMMING

Transmitter Programming (3 Chirps/Parking Light Flashes)

1. Turn the ignition ON.
2. Press and hold the valet/override button.
3. Within 10 seconds the system will chirp/flash the parking lights (3) three times, release the button.
4. Press Button 1 of each transmitter you wish to program.
5. The system will respond with 1 chirp for each accepted transmitter.
6. Pressing the override button at anytime during programming will advance to the next bank.

Note: This system has 1 button programming which programs all channels of the system.
Note: Transmitter programming will exit after 15 seconds or if the ignition is turned OFF, the system will sound (3) three long chirps and flash the parking lights (3) three times to confirm exit.

Manual Feature Bank Programming 2 - 6 (4-8 Chirps/Parking Light Flashes)

1. Turn the ignition ON
2. Press and Hold the valet/override button.
3. Within 10 Seconds the system will chirp/flash the parking lights (3) three times, release the button.
4. Use the valet/override button to advance through each option bank. For feature programming advance to Feature Bank 2 through 6 which is four to eight chirps/parking light flashes.
5. Use the transmitter "STAR" button to scroll through the selections in each feature bank, the siren/horn will chirp and the parking lights will flash to indicate each feature.
6. Press the transmitter LOCK button to change the desired feature. The LED will flash indicating the changed feature.
7. Continue changing desired features or turn ignition OFF to exit programming.

NOTE: Pressing UNLOCK at any point during programming will DEFAULT ALL FEATURES and return you to bank 2 (4 chirps).

NOTE: The system will remain in feature programming mode as long as the ignition is on, there is no time limit. To exit programming turn the IGNITION OFF.

SETUP & PROGRAMMING, CONTINUED

Custom Pin Code Programming

Programming your Pin Code (pin code must be two digits).

1. Turn the ignition ON.
2. Press and hold the programming button for 10 seconds, the system will chirp 3 times.
3. Advance to Feature Bank 3, (5 chirps).
4. Press and hold TRUNK button for three seconds to enter pin code programming, the siren will chirp twice and the LED will flash twice.
5. Enter the first digit by pressing the LOCK button 1-9 times.
6. Enter the second digit by pressing the UNLOCK button 1-9 times.
7. Press and hold TRUNK button for three seconds to confirm digit entry and exit programming, the system will give one long chirp and report entry by falshing the LED.

If the new pin code has been accepted (example pin code is 87), the unit will report back by flashing the LED 8 times to indicate the first digit, pause and then flash 7 times indicating the second digit.

Example: If the desired pin code is 87, durring step 5 you will press the LOCK button 8 times and durring step 7 you will press the LOCK button 7 times.

Note: Custom Code must be turned ON in feature bank 3 before a pin code can be programed. The default setting for this feature is OFF.

AUX 1 Optional Timer Programming

The AUX 1 output (VIOLET/BLACK) can be programmed with 3 preset times or a programable output time (between 1 and 120 seconds). To set the programable time follow the instuctions below:

1. Turn the ignition ON.
2. Press and hold the valet/override button for 10 seconds, the system will chirp 3 times
3. Press and release the valet/overide button 3 times to advance to Feature Bank 4 (6 chirps)
4. Press the STAR button on the transmitter to scroll to AUX 1 output programming.
5. Press the LOCK button to scroll to "Program Time", (4) four LED flashes.
6. Press and hold the valet/override button, the timer will immediately start.
7. When the desired time has elapsed (must be between 1 and 120 seconds) release the valet/override button. The system will sound 1 long chirp to verify programming.

SETUP & PROGRAMMING, CONTINUED

Programming Tach Rate

The unit will not operate unless tach is programmed or tachless option is turned ON. If an attempt is made to start the vehicle via the remote start without first programming tach, the unit will flash the parking lights 7 times indicating tach has not been learned and stored. If the tach rate is not properly programmed to the specific vehicle, the unit may not realize that the vehicle is running in certain instances reengage the starter motor.

The Remote Start unit will learn the tach rate of most vehicle's single coil, multiple coil packs, or single injector. To learn tach:

1. Turn the ignition key to the ON position.
2. Press and release the valet/override button 3 times.
3. Immediately turn the ignition key OFF.
4. Press and hold the valet/override button, then start the vehicle using the key.
5. When the unit senses the tach signal, the parking lights will begin to flash.
6. Allow the vehicle to settle to a normal idle speed.
7. Release the valet/program push-button switch. The parking lights will stay on, the LED will turn on for 2 seconds, and the system will sound 1 long chirp indicating that the learned tach signal is stored and the unit has exited tach learn mode.

NOTE: If the unit fails to learn tach rate due to an improper tachometer connection or a poor tach source, the parking lights will not flash. To correct this situation, locate and connect the PURPLE/WHITE wire to the proper tach signal, and then repeat the tach learn routine.

1. 6 PIN MAIN POWER HARNESS

Starter Output (Motor Side) (PURPLE) / Starter Kill Relay

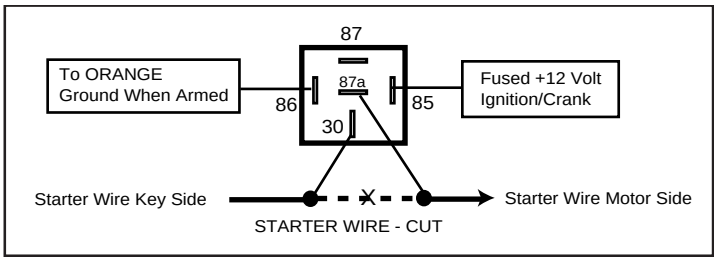
Locate the vehicle starter wire.

Verification: This wire registers voltage *only* when the key is turned to the START position. Cut the vehicle's starter wire in half when installing the starter kill relay.

Verification after starter wire is cut:

- KEY SIDE of starter wire registers voltage when the key is turned to the START position.
- MOTOR SIDE of starter wire registers no voltage.

▶ Connect the PURPLE wire to the MOTOR SIDE of the vehicle starter wire.



1. 6 PIN MAIN POWER HARNESS, CONTINUED

Battery Power (12AWG) (RED, 2 wires)

Note: Remove all 30 Amp fuses until all connections are made.

Locate 1 of the vehicle's constant 12 Volt battery wires at the ignition switch.
Verification: This wire will register voltage in all positions of the ignition switch.

- Connect the RED wire to the constant 12 Volt battery wire

IMPORTANT!

If the vehicle is equipped with more than one battery wire at the ignition switch, connect the RED wires from the 6- pin harness to separate vehicle battery wires.

12 volts Ignition Input/Output (12AWG) (PINK)

Locate the vehicle's ignition wire at the ignition switch.

Verification: This wire registers voltage when the key is turned to the ON (or RUN) position. The voltage does not drop out when the key is turned to the START (or CRANK) position.

- Connect the PINK wire to the vehicle's Ignition wire.
- This wire is also used for Ignition 1 Output.

Ignition 2 Output (12AWG) (PINK/WHITE)

Locate the vehicle's ignition 2 wire at the ignition switch (if equipped).

Verification: This wire registers voltage when the key is turned to the ON (or RUN) position, but not the ACC (Accessory) position. The voltage does not drop out when the key is turned to the START (or CRANK) position.

- Connect the PINK/WHITE wire to the vehicle's ignition 2 wire.

Accessory 1 (Heater/AC) Output (12 AWG) (ORANGE)

Locate the vehicle's accessory wire at the ignition switch.

Verification: This wire registers voltage when the key is turned to the ON (or RUN) position, but not the ACC (Accessory) position. The voltage drops out when the key is turned to the START (or CRANK) position.

- Connect the ORANGE wire to the vehicle's accessory wire.

2. 5 PIN BASE HARNESS

Parking Light Input (+/-) (WHITE/RED)

- Determin the vehicle's parking light polarity and connect this white as follows:

Positive Polarity Systems:

- Connect the WHITE/RED wire to a fused constant (+) 12 volt supply.

Negative Polarity Systems:

- Connect the WHITE/RED wire to chassis ground.

Parking Light Output (+/-) (WHITE)

Locate the vehicle's parking light wire at the vehicle light switch.

Verification: This wire will register positive voltage or ground when the vehicle parking light switch is turned to the ON position.

Positive Polarity Systems:

- Connect the WHITE wire to the vehicle's parking light wire.

Negative Polarity Systems:

- Connect the WHITE wire to the vehicle's parking light wire.

Chassis Ground Source (BLACK)

- Connect the BLACK wire to a solid chassis ground point using a ring terminal and self tapping screw (not supplied). Scrape away paint from the grounding point to ensure a good connection. The recommended grounding point is a metal surface in the driver's side kick panel area.

Note: Do not ground the BLACK wire with any other vehicle components.

Siren Output (+) (BROWN)

Locate a suitable mounting location in the engine compartment for the siren, away from moving parts.

- With the bell of the siren aiming downwards, secure the siren in place using self tapping screws (not supplied), being careful not do drill into any hoses, wiring or components.
- Connect the BLACK siren wire to a chassis ground using a ring terminal and self tapping screw (not supplied).
- Route the BROWN siren output wire from the control module through the firewall and connect to the RED wire on the siren.

Note: Be sure to loom the siren wires, and seal the grommet.

2. 5 PIN BASE HARNESS, CONTINUED

Battery Power (RED)

Note: Remove the 3 Amp fuse until all connections are made.

Locate 1 of the vehicle's constant 12 Volt battery wires at the ignition switch.
Verification: This wire will register voltage in all positions of the ignition switch.

- Connect the RED wire to the constant 12 Volt battery wire

3. 6 PIN AUXILARY HARNESS

Horn Output (-) (BROWN/BLACK)

NOTE: This output is progammable to the following options: Dome Light Supervision, Horn (default), Factory Security Disarm, Ground During Crank.

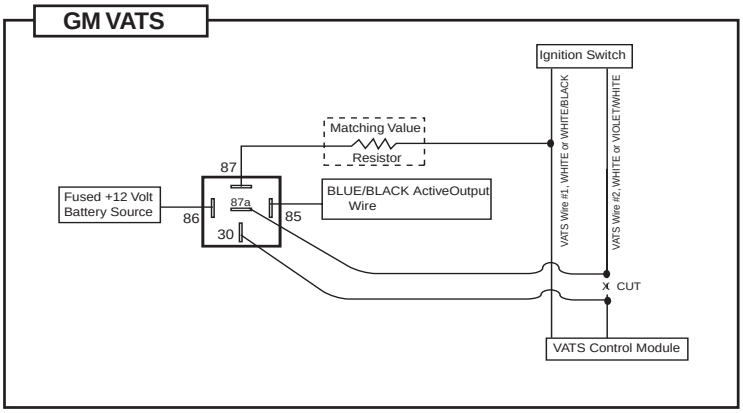
Locate the vehicle's horn wire.

Verification: This wire will register positive or negative voltage when the vehicle's horn is activated.

Active Output (-) (18 AWG) (BLUE/BLACK)

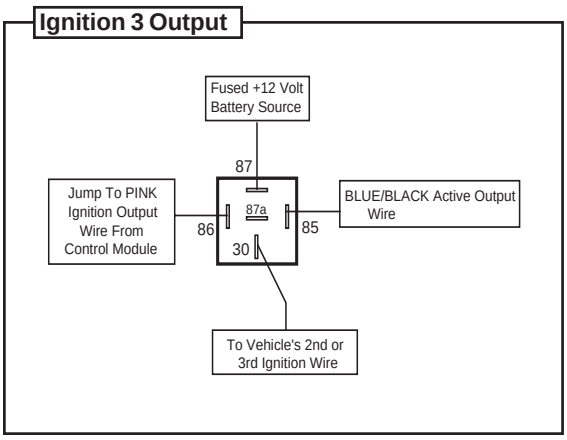
The Active Output/Ignition 3 output wire provides a ground output when the remote start function is activated and remains until 4 seconds after the remote start is shutdown. The Ignition 3 output wire can be used for several functions listed below. If this wire will be used for multiple applications a 1 amp diode is required in-line with the stripe facing the control module.

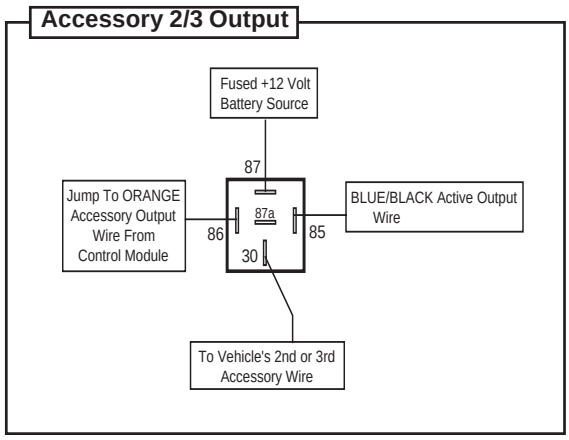
- Factory transponder (coded key) bypass.
- General Motors VATS bypass, see the diagram below. Use an SPDT relay (not supplied).



- Ignition 3 output, see the diagram on the following page. Use an SPDT relay (not supplied).
- Accessory 2/3 output, see the diagram on the following page. Use an SPDT relay(not supplied).

3. 6 PIN AUXILARY HARNESS, CONTINUED





AUX 1 (-) (VIOLET/BLACK)

This wire provides a 500mA negative output capable of driving relays. For control of optional accessories (i.e. Power Window/Sunroof,etc.).

- To Activate press and hold LOCK & TRUNK. Please refer to the selectable options for timing.

Selectable timing: Push & Hold / Press to Latch ON Press to Latch OFF / Press to latch ON and reset with ignition / Programable 1second to 2 minutes, (see AUX 1 optional timmer programming).

Trunk Release Output (-) 500mA (RED/WHITE)

Locate the vehicle's trunk release wire at the trunk release switch.
Verification: This wire will register either positive voltage or ground when the trunk release is activated.

Factory Disarm Output (-) (LT. GREEN/BLACK)

This wire provides a (-) 500mA output with the press of UNLOCK, when the remote start feature is activated and when the trunk feature is activated.

NOTE: This output is programmable to the following options: 2nd Door Unlock, Factory Disarm (default), Start Status Output.

Ground When Armed Output (-) 500mA (ORANGE)

- This wire will show Ground when the system is Armed. This wire is used for starter kill relay or controlling optional window modules and additional sensors.

4. 8 PIN INPUT HARNESS

Instant Trigger Input (BLUE/WHITE)

This wire is a GROUND input for an external sensor or secondary pin switch.

Verification: This wire when connected will trigger the security system

Negative Door Input (GREEN)

Locate the vehicle's dome light or door pin switch wire.

Verification: This wire will register ground (NEG) when the door is opened and the interior light is on. This wire will register positive voltage when the door is closed and the interior light is off.

- Connect the GREEN wire to the vehicle's negative door input wire(s).

NOTE: Certain vehicles may require multiple connections. Refer to vehicle application guide

Positive Door Input (PURPLE)

Locate the vehicle's dome light or door pin switch wire.

Verification: This wire will register positive voltage(POS) when the door is opened and the interior light is on. This wire will register ground or "0" Volts when the door is closed and the interior light is off.

- Connect the PURPLE wire to the vehicle's positive door input wire(s).

NOTE: Certain vehicles may require multiple connections. Refer to vehicle application guide

External Start Trigger (-) (WHITE/BLUE)

NOTE: The following connection is only required on a REMOTE START installation

- This wire will activate the Remote Start when a GROUND pulse is applied to it from an external device.

Hood Pin Input / Negative Shutdown (-) (GRAY)

Install a Hood Pin Switch and connect to the GRAY wire. This connection is required for Remote Start.

Verification: This wire when connected will register ground when the vehicle's hood is opened.

- Connect the GRAY wire to the hood pin.

Note: Be sure to loom the wire, and seal the grommet.

Nuetral Safety Input (-) Input (BLACK/WHITE)

The BLACK/WHITE nuetral safty input wire to the nuetral safty wire of the vehicle or an optional toggle switch. This wire must see ground for the remote start feature to operate.

4. 8 PIN INPUT HARNESS, CONTINUED

Positive Shutdown, Brake Safety Switch Wire (18 AWG) (BROWN/RED)

Locate the vehicle's brake light wire at the brake pedal mounted switch.

Verification: This wire registers positive voltage when the brake pedal is pressed.

▶ Connect the BROWN/RED wire to the vehicle's brake light wire.

Vehicle Tach Signal (18 AWG) (PURPLE/WHITE)

Locate the vehicle's ignition coil or fuel injector in the engine compartment.

Verification: Refer to Vehicle Wire Color and Location Chart for the wire color and location, or test using the following procedure:

1. Set voltmeter to AC VOLTS.
2. Attach positive lead of a volt meter to a constant 12-volt source.
3. Attach negative lead of a volt meter to the wire to be tested.
4. Start the engine.
5. Have someone press on the gas pedal slightly as you monitor the meter. If connected to the correct wire, the voltage reading will increase as the engine's RPM increases.

▶ Connect the PURPLE/WHITE wire to the negative side of the vehicle ignition coil or fuel injector.

5. DOOR LOCKS

Negative Lock Output / Positive Unlock Output (GREEN)
Negative Unlock Output / Positive Lock Output (BLUE)

Negative Second Door Unlock Output (LT. GREEN/BLACK Must be changed in programming)

The door lock / unlock outputs are designed to control several different types of systems which may require additional parts. Please review the wire and location chart to see which type of door lock system is in your vehicle. The most common types are shown in the diagrams below.

Negative Switching and Negative Switching with 2-step unlock feature:

All Door Lock and Unlock: Locate the lock / unlock wire at the vehicle's lock / unlock switch.

Verification: These wires will register ground when the Lock and Unlock switches are activated.

Driver's Door Unlock: Locate the unlock motor wire directly from the actuator inside the driver's door.

Verification: This wire will rest at ground and register positive voltage when the driver's door is unlocked.

- Connect the GREEN and BLUE or LT. GREEN/BLACK wires shown in diagram 6 below.

Note: When adding the 2 step unlock feature the LT. GREEN/BLACK 2nd door unlock wire will be used to unlock all vehicle doors on the second press of unlock. An additional SPDT relay (not supplied) is required. Connect the relay as shown in diagram 7 to unlock the driver's door on the first press of unlock.

Diagram 6

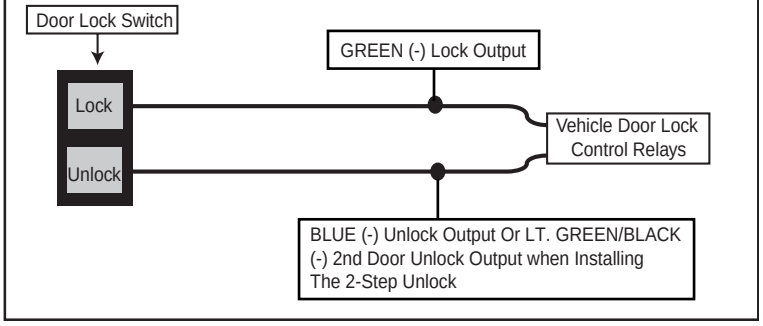
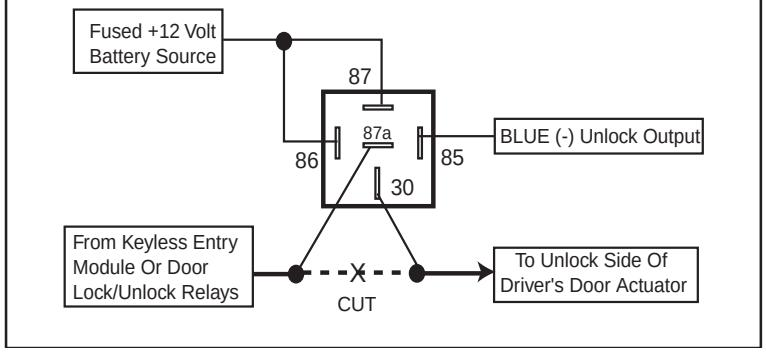

Door Lock Switch
Lock
Unlock
GREEN (-) Lock Output
Vehicle Door Lock Control Relays
BLUE (-) Unlock Output Or LT. GREEN/BLACK (-) 2nd Door Unlock Output when Installing The 2-Step Unlock

Diagram 7



5. DOOR LOCKS

Negative Lock Output / Positive Unlock Output (GREEN)
Negative Unlock Output / Positive Lock Output (BLUE)

Negative Second Door Unlock Output (LT. GREEN/BLACK Must be changed in programming)

Positive Switching and Positive Switching with 2-step unlock feature:

All Door Lock and Unlock: Locate the lock / unlock wire at the vehicle's lock / unlock switch.

Verification: These wires will register positive voltage when the Lock and Unlock switches are activated.

Driver's Door Unlock: Locate the unlock motor wire directly from the actuator inside the driver's door.

Verification: This wire will rest at ground and register positive voltage when the driver's door is unlocked.

▶ Connect the GREEN and BLUE or LT. GREEN/BLACK wires shown in diagram 8 below.

Note: When adding the 2 step unlock feature the LT. GREEN/BLACK 2nd door unlock wire will be used to unlock all vehicle doors on the second press of unlock. Two additional SPDT relays (not supplied) are required. Connect the relays as shown in diagram 9 to unlock the driver's door on the first press of unlock.

Diagram 8

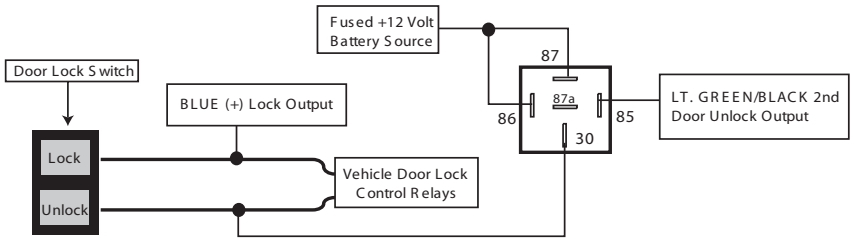
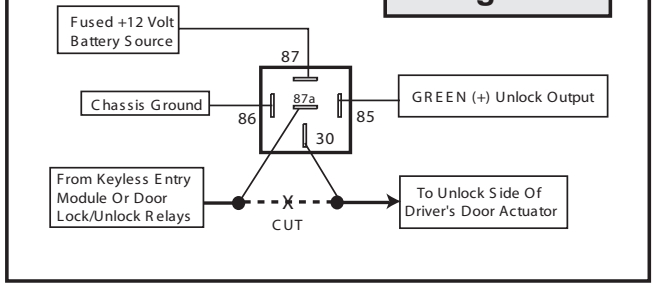


Diagram 9



5. DOOR LOCKS

Negative Lock Output / Positive Unlock Output (GREEN)
Negative Unlock Output / Positive Lock Output (BLUE)

Negative Second Door Unlock Output (LT. GREEN/BLACK Must be changed in programming)

Reverse Polarity (5-Wire Door locks) and Reverse Polarity with 2-step Unlock

All Door Lock and Unlock: Locate the lock / unlock wire at the vehicle's lock / unlock switch.

Verification: These wires will rest at ground and register positive voltage when the Lock and Unlock switches are activated.

Driver's Door Unlock: Locate the unlock motor wire directly from the actuator inside the driver's door.

Verification: This wire will rest at ground and register positive voltage when the driver's door is unlocked.

- Connect the GREEN and BLUE or LT. GREEN/BLACK wires shown in diagram 10 below using (2) SPDT relays (not supplied).

Note: When adding the 2 step unlock feature the LT. GREEN/BLACK 2nd door unlock wire will be used to unlock all vehicle doors on the second press of unlock. An additional SPDT relay (not supplied) is required. Connect the relays as shown in diagram 11 to unlock the driver's door on the first press of unlock

Diagram 10

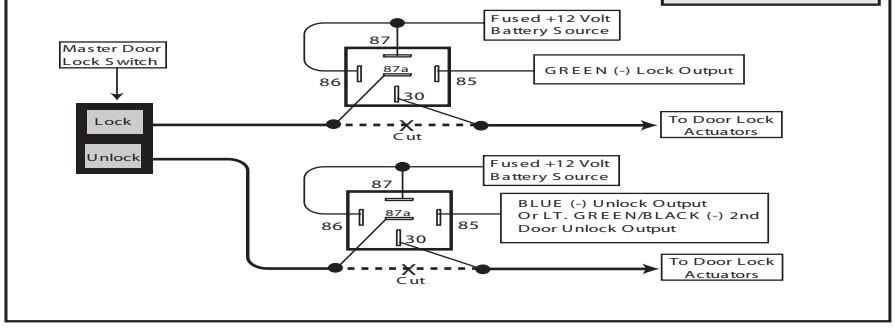
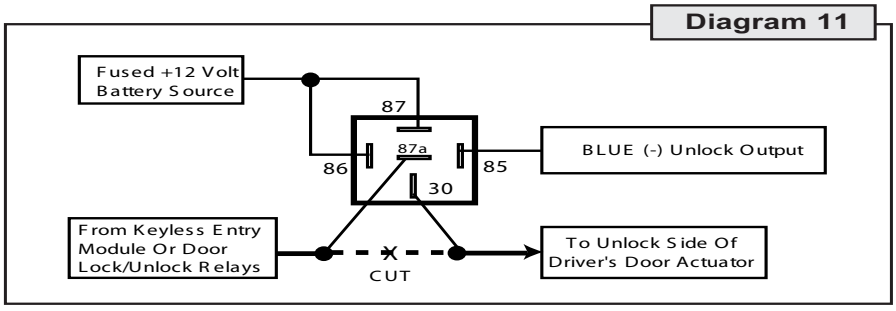


Diagram 11



5. DOOR LOCKS

Negative Lock Output / Positive Unlock Output (GREEN)
Negative Unlock Output / Positive Lock Output (BLUE)

Negative Second Door Unlock Output (LT. GREEN/BLACK Must be changed in programming)

One Wire Negative Multiplexed and One Wire Negative Multiplexed with 2-step Unlock Feature

All Door Lock and Unlock: Locate the lock / unlock wire at the vehicle's lock / unlock switch.

Verification: This wire will show variable ground when the switch is activated. Please consult the wire and location chart for specific resistor values for your vehicle.

Driver's Door Unlock: Locate the unlock motor wire directly from the actuator inside the driver's door.

Verification: This wire will rest at ground and register positive voltage when the driver's door is unlocked.

▶ Connect the GREEN and BLUE or LT. GREEN/BLACK wires shown in diagram 12 below using (2) SPDT relays (not supplied).

Note: When adding the 2 step unlock feature the LT. GREEN/BLACK 2nd door unlock wire will be used to unlock all vehicle doors on the second press of unlock. An additional SPDT relay (not supplied) is required. Connect the relay as shown in diagram 13 to unlock the driver's door on the first press of unlock

Diagram 12

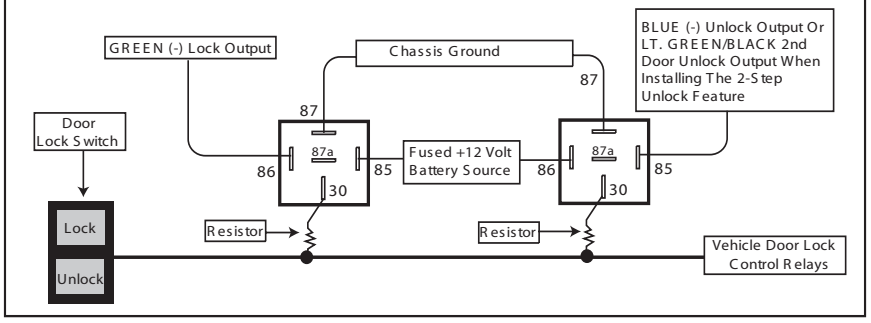
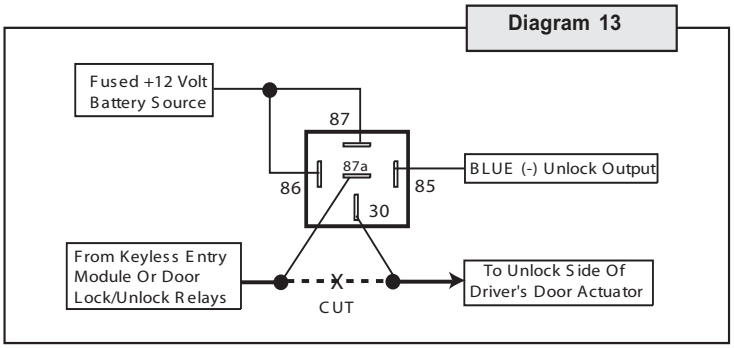


Diagram 13



5. DOOR LOCKS

Negative Lock Output / Positive Unlock Output (GREEN)
Negative Unlock Output / Positive Lock Output (BLUE)

Negative Second Door Unlock Output (LT. GREEN/BLACK Must be changed in programming)

One Wire Positive Multiplexed and One Wire Multiplexed With 2-step Unlock Feature

All Door Lock and Unlock: Locate the lock / unlock wire at the vehicle's lock / unlock switch.

Verification: This wire will show variable positive voltage when the switch is activated. Please consult the wire and location chart for specific resistor values for your vehicle.

Driver's Door Unlock: Locate the unlock motor wire directly from the actuator inside the driver's door.

Verification: This wire will rest at ground and register positive voltage when the driver's door is unlocked.

- Connect the GREEN and BLUE or LT. GREEN/BLACK wires shown in diagram 14 below using (2) SPDT relays (not supplied).

Note: When adding the 2 step unlock feature the LT. GREEN/BLACK 2nd door unlock wire will be used to unlock all vehicle doors on the second press of unlock. An additional SPDT relay (not supplied) is required. Connect the relay as shown in diagram 15 to unlock the driver's door on the first press of unlock.

Diagram 14

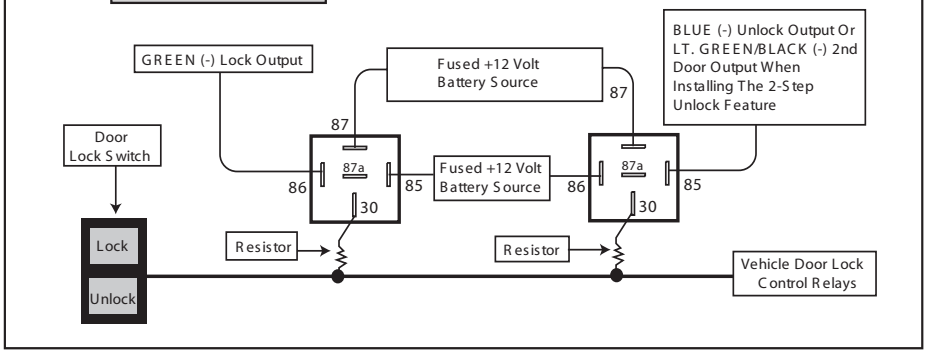
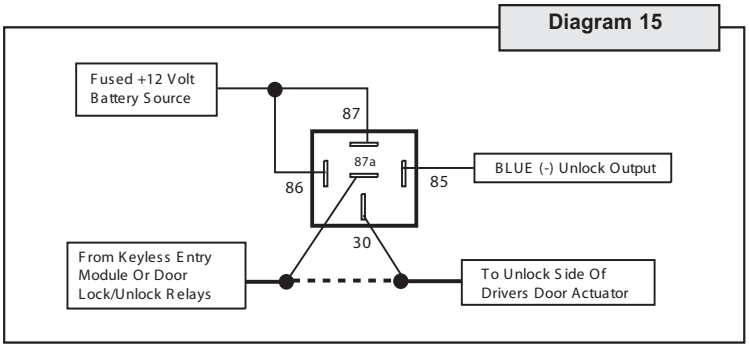


Diagram 15



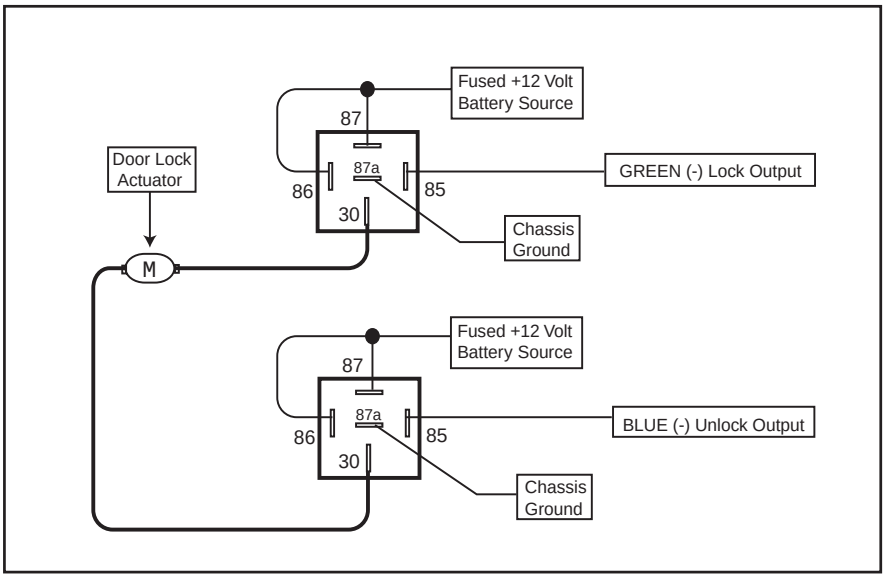
5. DOOR LOCKS

Negative Lock Output / Positive Unlock Output (GREEN)
Negative Unlock Output / Positive Lock Output (BLUE)

Negative Second Door Unlock Output (LT. GREEN/BLACK Must be changed in programming)

Adding Aftermarket Actuators

- After installing aftermarket actuators (not supplied), connect the GREEN and BLUE wires shown in the diagram below using (2) SPDT relays (not supplied).



6. ACCESSORY CONNECTORS

2 Pin Valet/Program/Override Push-Button Switch: (Blue Connector)

The BLACK & BLACK/WHITE twin lead wires loaded in the two pin blue connector are the ground supply and program/valet/override input of the Remote Start unit. Drill a 9/32" hole and mount this switch in an easily accessible location under the driver's dashboard.

4 Pin Antenna/Receiver Connector: (Black Connector)

Mount the supplied antenna/receiver to a clear spot on the vehicle's windshield that will not block the driver's vision. A good location is usually high on the windshield near the rear view mirror. Be careful not to mount the antenna/receiver on any metallic window film, as this will effect system range. Route the antenna/receiver cable to the control module and plug in to the 4 pin black connector.

2 Pin LED Harness: (White Connector)

The Red & Blue wires loaded into the two pin mini white connector control the anode and cathode of the dash mounted LED. Drill a 1/4" hole and mount the LED in an easy to see location on the dashboard. Be careful to check to make sure that there is enough clearence behind the panel you are drilling into.

4 Pin Data Bus Interface Port: (Brown Connector)

This 4 pin port is used for Code Alarm Door Lock and Transponder Databus Interfaces to communicate with the vehicle's Databus. When using the DBI port to control the Code Alarm Door Lock and Transponder Interface modules the following options may be available. Please refer to the D2D (Data to Data) function list available per vehicle on the tech service web site.

Tach Input	Brake Safety Shut Down
Door Trigger	Trunk/Hatch Open
Door Lock Control	Passlock / Passkey Interface (GM Only)
Dome Light Supervision	Transponder Interface Activation
Factory Alarm Arm / Disarm	Manual Arm / Disarm Inputs (factory keyless controls system)
Diesel Glow Plug Input	

7. SYSTEM POWER-UP PROCEDURE

1. After all connnections are complete, turn the vehicle's ignition key to the ON position.
2. Insert both 30 Amp fuses into their respective fuseholders.
3. Turn the ignition key to the OFF position

8. MOUNTING THE MODULE / FINISHING THE INSTALLATION

1. Mount the module to a brace or wire harness under the dash. The module and harnesses must be clear of moving parts.
2. Completely uncoil the antenna and route up the nearest front window pillar to the headliner. Be careful not to pinch the antenna under vehicle panels, or route near moving parts.
3. Route the antenna across the headliner to a position behind the rearview mirror.
4. Attach the antenna to the inside of the windshield behind the rearview mirror:
   - The glass surface must be clean before mounting antenna. Use rubbing alcohol to thoroughly clean the mounting location.
   - Remove protective backing and press firmly against windshield.
5. Plug antenna into the Reciever Plug located in the back of module. (Black Connector)

Installation Complete.

CODE ALARM